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(54) FREQUENCY OFFSET DETECTION CIRCUIT

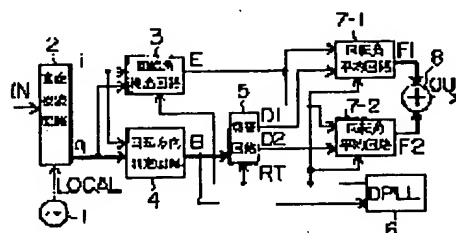
(57) Abstract:

PROBLEM TO BE SOLVED: To output a true intermediate frequency even if a bias occurs in the rate of the occurrence of two kinds of symbols (mark and space) in an FSK signal.

SOLUTION: The in-phase component (i) and the quadrature component (q) of a base band signal, which are obtained by quadrature detecting 2 an input signal which is FSK-modulated, are inputted to a rotation angle detection circuit 3 and a rotation direction judgment circuit 4. Then, phase rotation quantity E and the direction B of positive or negative sense are obtained. Reception symbol timing RT generated in a

digital phase locked loop 6 is switched 5 so that it becomes output D1 when B is positive, and output D2 when B is negative, it is inputted to rotation angle averaging circuit 7-1 and 7-2. Then, rotation quantity E is sampled at respective timings and the average values are obtained and are added.

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